

***Acanthilia*, a new genus of leucosioid crabs (Crustacea: Brachyura)  
from the Atlantic coast of the Americas**

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*Abstract.*—A new monotypic leucosioid genus, *Acanthilia*, is established from the Atlantic coast of the Americas, for one species of the genus *Iliacantha* Stimpson, *I. intermedia* Miers. The new genus differs from *Iliacantha* in its tridentate anterior margin of the efferent branchial channel, the shorter cheliped fingers, the glabrous pereopodal dactyls, the convex margins of the sixth abdominal segment in the male, and the claw-tipped first male pleopod.

As part of an on-going study of leucosioidean crabs, the leucosioids of the Atlantic coast of the Americas at the National Museum of Natural History, Smithsonian Institution (USNM), were examined. An investigation of *Iliacantha* Stimpson, 1871, showed that *I. intermedia* Miers, 1886, differs from the five other members of the genus in its tridentate anterior margin of the efferent channel, the shorter cheliped fingers, the glabrous pereopodal dactyls, the convex margins of the sixth abdominal segment in the male, and the claw-tipped male pleopod. *I. intermedia* was removed from the genus *Iliacantha* and placed in a new genus herein established.

*Acanthilia*, new genus

*Diagnosis.*—Carapace subovate, globose; regions indistinct. Front narrow, prominent, bilobed. Basal antennular segment forming an operculum, partially sealing antennular aperture. Antennular fossa not separated from orbit. Orbital margin with 3 sutures, basal antennal segment inserted in orbital hiatus proximally on ventral margin. Postorbital region concave. Third maxillipeds fitting closely, sealing buccal cavity, efferent branchial channel. Inner surface of 3 maxilliped exognath gla-

brous. Anterior margin of efferent branchial channel produced, tridentate, contiguous with lower orbital margin.

Anterolateral margin of carapace medially concave, posterolateral margin uniformly curved. Posterior margin of carapace bidentate. Spine on posterior intestinal region upcurved, projecting beyond posterior denticles. Abdominal sulcus in male deep, nearly reaching buccal cavity.

Chelipeds long; merus subcylindrical; propodus swollen basally; fingers half as long as propodus, opening vertically. Pereiopods short, dactyls triquetrous, longer than propodi, glabrous.

Male abdomen with segments 3–5 fused, tapering distally, basio-lateral regions of fused segments somewhat inflated; lateral margins of segment 6 convex. Female abdomen with segments 4–6 fused, greatly swollen.

Male first pleopod stout, tip claw-shaped; second pleopod short, distally scoop-like.

*Type species.*—*Iliacantha intermedia* Miers, 1886.

*Etymology.*—*Acanthilia* is an anagram of *Iliacantha* Stimpson, 1871.

*Remarks.*—Stimpson (1871) erected the genus *Iliacantha* for two species, *I. subglobosa* and *I. sparsa*, collected off Florida, and characterized by three posterior spines,

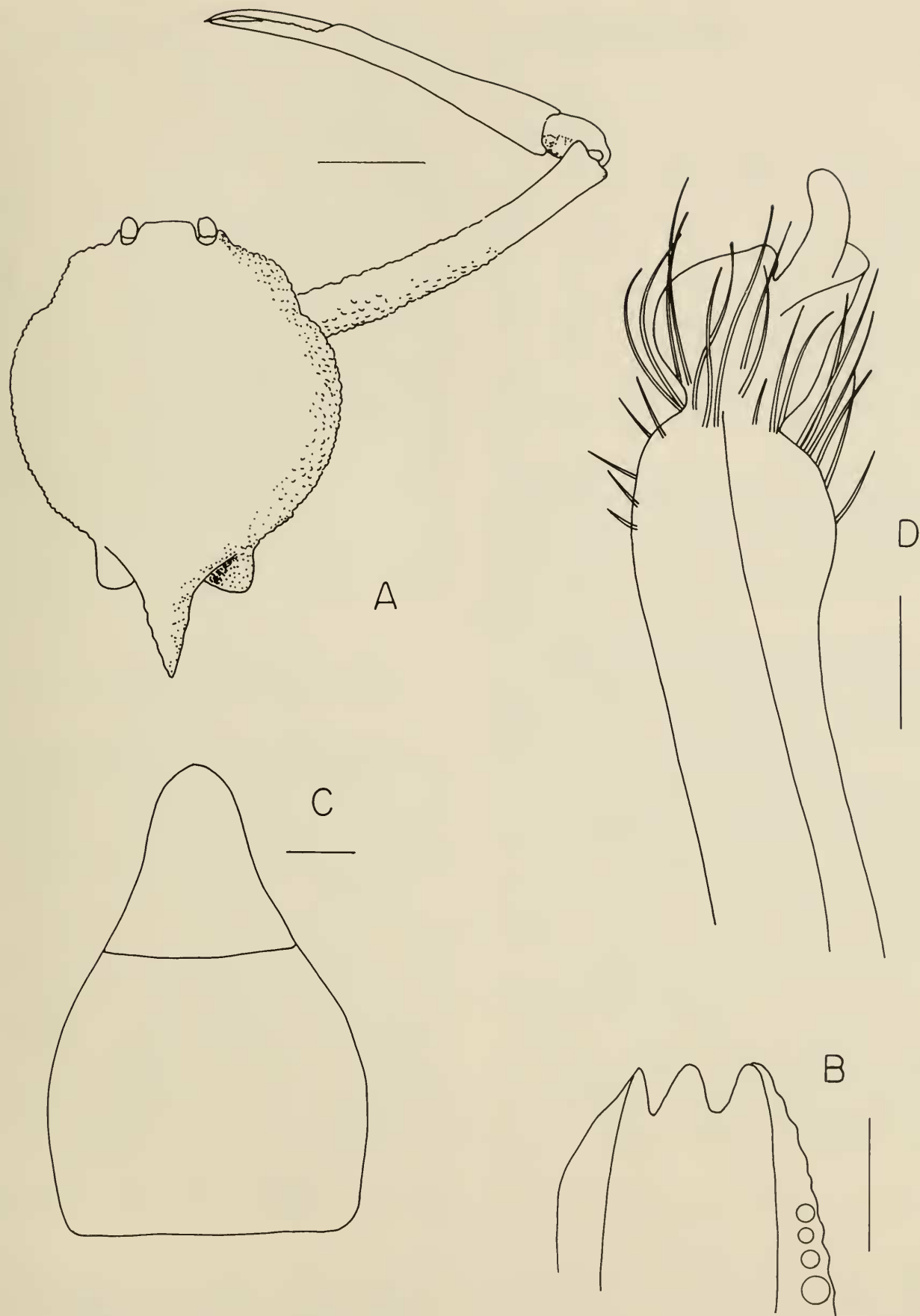


Fig. 1. *Acanthilia intermedia* (Miers, 1886).—♂ (USNM 274840). A, carapace and right cheliped, dorsal view; B, anterior margin of efferent branchial channel; C, sixth abdominal segment and telson, ventral view; D, tip of first pleopod, ventral view. A, 5 mm; B,C,D, 0.1 mm.

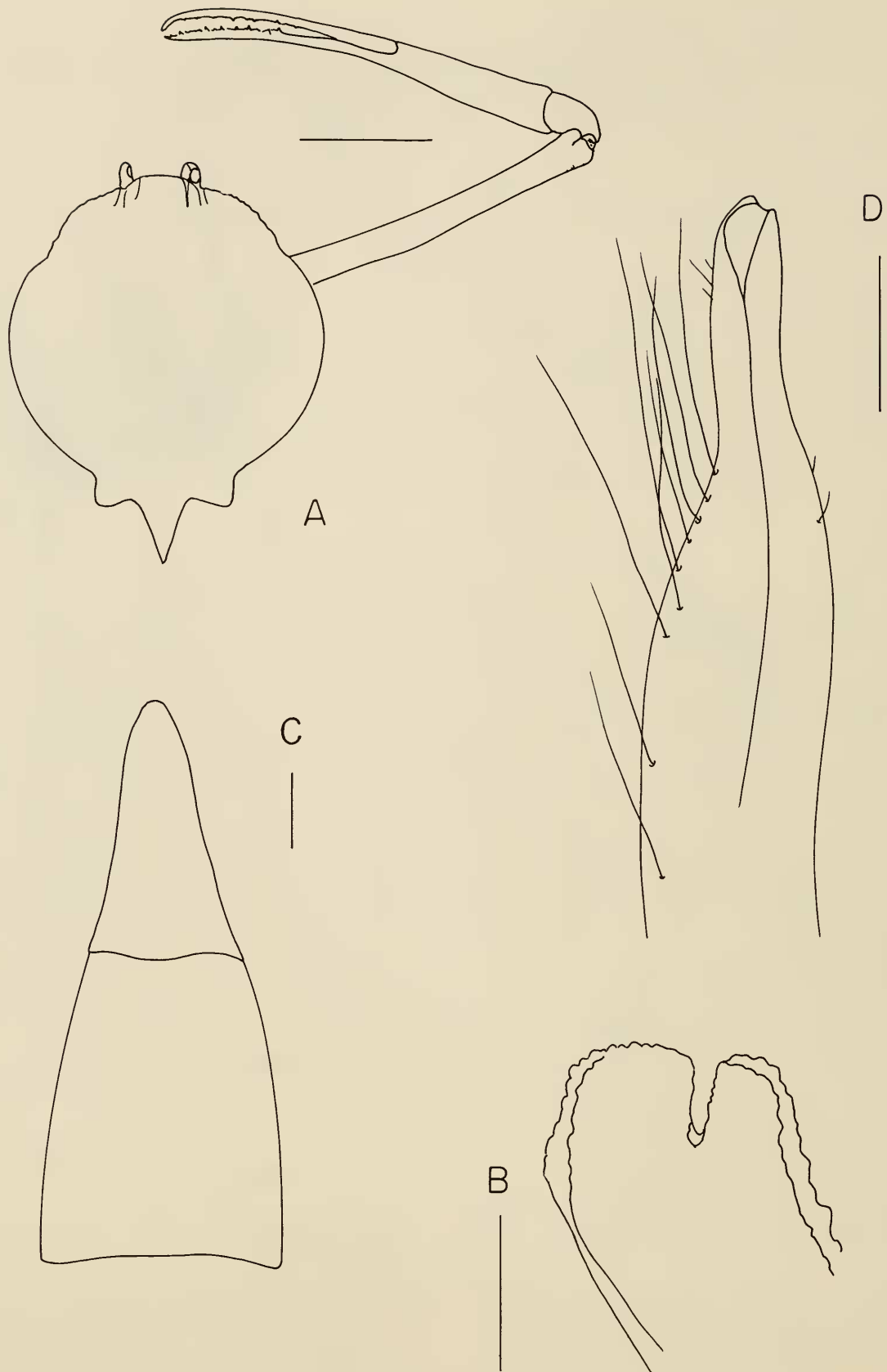


Fig. 2. *Iliacantha subglobosa*.—♂ (USNM 274724). A, carapace and right cheliped, dorsal view; B, anterior margin of efferent branchial channel, ventral view; C, sixth abdominal segment and telson, ventral view; D, tip of first pleopod, ventral view. A, 5 mm; B,C,D, 0.1 mm.

cheliped fingers opening vertically, and projecting pterygostomian channels. When describing *I. intermedia*, Miers (1886:302) noted it differed from Stimpson's species in the "length of the dactyli of the chelipeds".

*Acanthilia*, new genus, is easily distinguished from *Iliacantha* by the tridentate margin of the efferent branchial channel (Fig. 1B), the cheliped fingers half as long as the propodus (Fig. 1A), the glabrous pereopodal dactyls, the convex margins of the male abdominal segment 6 (Fig. 1C), and the claw-tipped first male pleopod (Fig. 1D); whereas in *Iliacantha* the margin of efferent channel is bilobate (Fig. 2B), the cheliped fingers are longer than the propodus (Fig. 2A), pereopodal dactyls are setose, margins of the male abdominal segment 6 are straight (Fig. 2C), and the first male pleopod is distally tapering, simple (Fig. 2D).

*Acanthilia intermedia* (Miers, 1886)

Fig. 1

*Iliacantha intermedia* Miers, 1886:302, pl. 26, fig. 3.—Hay & Shore, 1918:424, pl. 32, figs. 3, 3a.—Rathbun, 1937:186, pl. 54, figs. 1, 2.—Williams, 1965:151, fig. 129; 1984:290, fig. 225.—Coelho, 1970:234.—Coelho & Ramos, 1972:184.—Fausto-Filho, 1975:81; 1979:51.—Gómez & Ortiz, 1976:8.—Powers, 1977:37.—Coelho & Torres, 1980:72.—Rodrigues, 1980:259.—Takeda, 1983:118.—Keith, 1985:254, fig. 2f.—Abele & Kim, 1986:42, fig. 485 b.—Taissoun, 1988:126.—Werding & Müller, 1990:412, figs. 7a–c.—de Melo, 1996:159, fig.—de Melo et al., 1998:450.

*Iliacantha liodactylus* Takeda, 1983:119, fig.

*Material examined*.—United States. North Carolina, 33°20'N, 77°46'W, 25 m, 16 Aug 1977, 2 ♂♂ 15.8, 20.0 mm, ♀ juv. 12.2 mm (USNM 174250).—Georgia, 31°41.12'N, 80°20.48'W, 28 m, 30 Jan 1980, ♂ 21.6 mm (USNM 214909).—Sapelo Is., 22 m, 5 Mar 1963, coll. M. Gray,

♂ 22.5 mm (USNM 155484).—Florida, 25°45.56'N, 82°09.21'W, 19.6 m, 28 Apr 1981, coll. R. Lemaitre, ovigerous ♀ 25.1 mm (USNM 242750).

*Redescription*.—Dorsal surface of carapace granulate, front minutely shagreened. Fronto-orbital margin half as wide as posterior margin, slightly concave. Anterolateral margin set with prominent pearliform granules, subhepatic margin somewhat inflated. Posterior margin bearing pair of dorso-ventrally flattened triangular denticles laterally, pearliform granules medially. Intestinal spine prominent, granulate, upcurved.

Anterior margin of efferent branchial channel prominently tridentate, advanced beyond orbital margin. Third maxilliped bearing fungiform granules, crowded anteriorly, female ischium longitudinally traversed by row of setae.

Cheliped merus granulose, granules larger proximally; carpus and propodus smooth, fingers costate. Pereopodal meri minutely granulate, upper margin of propodi prominently costate, dactyli styliform.

Thoracic sternites closely granulate. Male abdomen minutely granulate, fused segments of female abdomen smooth except for granulate basal margin. Male first pleopod slightly sinuous, dorso-ventrally flattened, subapically setose; cornute tip bearing subquadrate plate proximally, claw-like appendix distally.

*Color*.—"gray, without markings of any kind" (Hay & Shore 1918:424), "Amarillo crema o gris con puntos pequeños dispersos de color marrón claro" (Taissoun 1988:126).

*Remarks*.—The color plates of *I. intermedia* and *I. liodactylus* (Takeda, 1983:118, 119) were erroneously exchanged.

*Distribution*.—North Carolina to Brazil; 10–329 m.

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